Amendments to the Claims:

Please add new claims 52-65 as shown below. Following is a complete listing of the claims pending in the application, as amended:

1-45. (Cancelled)

46. (Original) A microelectronic substrate assembly for use in controlling mechanical and/or chemical-mechanical planarization processes, comprising:

a substrate;

a first layer of a first material having first color, the first layer being disposed over at least a portion of the substrate, and the first layer having a first surface defining a desired endpoint elevation for a planarizing cycle;

a second layer of a second material disposed over the first layer, the second layer having a second color different than the first color; and

a sacrificial marker layer of a third material having a third color optically distinct from the first and second colors of the first and second materials.

47. (Original) The microelectronic substrate of claim 46 wherein:

the first material comprises silicon nitride;

the second material comprises silicon dioxide; and

the third material of the sacrificial marker layer comprises an opaque resist material.

48. (Original) The microelectronic substrate of claim 46 wherein:

the first material comprises silicon nitride;

the second material comprises silicon dioxide; and

the third material of the sacrificial marker layer comprises an optically transmissive material.

49. (Original) The microelectronic substrate of claim 46 wherein:
the first material comprises silicon nitride;
the second material comprises silicon dioxide; and
the third material of the sacrificial marker layer comprises a red layer of material.

50. (Original) The microelectronic substrate of claim 46 wherein:
the first material comprises silicon nitride;
the second material comprises silicon dioxide; and
the third material of the sacrificial marker layer comprises a black layer of material.

51. (Original) The microelectronic substrate of claim 46 wherein:
the first material comprises silicon nitride;
the second material comprises silicon dioxide; and
the third material of the sacrificial marker layer comprises a white layer of material.

52. (New) A microelectronic substrate assembly for use in controlling mechanical and/or chemical-mechanical planarization processes, comprising:
a substrate;
a first layer of a first material having a first color, the first layer being disposed over at least a portion of the substrate;
a second layer of a second material having a second color, the second layer being disposed relative to the first layer; and
a sacrificial marker layer of a third material having a third color optically distinct from the first and second colors of the first and second materials, the sacrificial layer being disposed between the first layer and the second layer.

53. (New) The microelectronic substrate of claim 52 wherein the sacrificial layer is on the first layer and the second layer is on the sacrificial layer.

54. (New) The microelectronic substrate of claim 52 wherein the first layer is silicon nitride, the second layer is silicon dioxide, and the sacrificial layer is an opaque material.

55. (New) The microelectronic substrate of claim 52 wherein the first layer is silicon nitride, the second layer is silicon dioxide, the sacrificial layer is on the first layer, and the second layer is on the sacrificial layer.

56. (New) The microelectronic substrate of claim 52 wherein the first layer comprises silicon nitride, the second layer comprises silicon dioxide, and the third material of the sacrificial layer is red.

57. (New) The microelectronic substrate of claim 52 wherein the first layer comprises silicon nitride, the second layer comprises silicon dioxide, and the third material of the sacrificial layer is black.

58. (New) The microelectronic substrate of claim 52 wherein the first layer comprises silicon nitride, the second layer comprises silicon dioxide, and the third material of the sacrificial layer is white.

59. (New) A method of mechanical and/or chemical-mechanical planarization of a microelectronic workpiece, comprising:

providing a microelectronic workpiece including (a) a substrate, (b) a first layer of a first material having a first color, the first layer being disposed over at least a portion of the substrate, (c) a second layer of a second material having a second color, the second layer being disposed relative to the first layer, and (c) a sacrificial marker layer

of a third material having a third color optically distinct from the first and second colors of the first and second materials, the sacrificial layer being disposed between the first layer and the second layer;

contacting a face of the substrate with a planarizing surface of a planarizing pad while moving the substrate and/or the planarizing pad relative to each other;

impinging a series of light pulses against the substrate including a first light pulse at a first time interval and a second light pulse at a second time interval, the first light pulse having a first frequency and the second light pulse having a second frequency;

sensing a first intensity of a first return light pulse corresponding to the first light pulse reflecting from the substrate and a second intensity of a second return light pulse corresponding to the second light pulse reflecting from the substrate; and

controlling a parameter of the planarization process when the first and second intensities indicate that the sacrificial layer is exposed and/or at least partially removed from the substrate.

60. (New) The method of claim 59 wherein controlling a parameter of the planarization process comprises indicating the intensity of the second color of the second layer and the intensity of third color of the sacrificial layer.

61. (New) The method of claim 59 wherein controlling a parameter of the planarization process comprises indicating the intensity of the first color of the first layer and the intensity of the third color of the sacrificial layer.

62. (New) The method of claim 59 wherein the sacrificial layer is red and controlling a parameter of the planarization process comprises indicating the intensity of the first color of the first layer, the second color of the second layer, and the third color of the sacrificial layer.

63. (New) The method of claim 62 wherein one of the first light pulse or second light pulse is red, the sacrificial layer is red, and indicating the intensity of the sacrificial layer comprises impinging the first or second pulse of red light against the substrate and sensing the intensity of the return pulse of the red light.

64. (New) The method of claim 62 wherein the sacrificial layer is white and indicating the intensity of the sacrificial layer comprises impinging discreet pulses of red, green and blue light against the substrate and sensing the intensities of return pulses of the red, green and blue light.

65. (New) The method of claim 62 wherein the sacrificial layer is black and indicating the intensity of the sacrificial layer comprises impinging discreet pulses of red, green and blue light against the substrate and sensing the intensities of return pulses of the red, green and blue light.